

IN THE CLAIMS:

For the convenience of the Examiner, all pending claims that differ from US 5,940,600 as issued are included below as amended. Please add new claim 18.

1. (Amended) A method comprising:

configuring an isochronous channel within a computer system to include a linked list of buffers configured to receive isochronous data transmitted within said computer system, each buffer comprising a data field for storing the isochronous data and a condition field for storing condition data to be evaluated against a condition;

adding a sender client configured to transmit said isochronous data to said isochronous channel, said sender client being a software driver routine associated with a sender node of said computer system, and providing said sender client with a channel identifier; and

adding a listener client to said isochronous channel, said listener client being a software driver routine associated with a listener node of said computer system, by providing said listener client with said channel identifier, and said listener client loading the isochronous data into the linked list of buffers, and evaluating the condition data in the condition field of each buffer to determine a next one of the buffers from which to next access isochronous data.

7. (Amended) A method comprising:

1 configuring an isochronous channel within a computer system to include a linked list of buffers configured to receive isochronous data transmitted within said computer system;

adding a sender client configured to transmit said isochronous data to said isochronous channel, said sender client being a software driver routine associated with a sender node of said computer system, and providing said sender client with a channel identifier;

adding a listener client to said isochronous channel, said listener client being a software driver routine associated with a listener node of said computer system, by providing said listener client with said channel identifier;

transmitting said isochronous data from said sender client to said linked list of buffers across said isochronous channel; and

receiving said isochronous data at said linked list of buffers by [The method of claim 17]

6 wherein said receiving comprises] interrupting a central processing unit of said computer system and transferring said isochronous data from a port coupled to said central processing unit to said linked list of buffers.

8. (Amended) A sequence of computer-readable instructions embodied on a computer-readable medium comprising instructions arranged to cause a processor to configure an isochronous channel within a computer system including said processor to include a linked list of buffers configured to receive isochronous data transmitted within said computer system, each buffer comprising a data field for storing the isochronous data and a condition field for storing condition data to be evaluated against a condition, and to cause said processor to add a sender

client to said isochronous channel and to cause said processor to add a listener client to said isochronous channel, and said listener client loading the isochronous data into the linked list of buffers and evaluating the condition data in the condition field of each buffer to determine a next one of the buffers from which to next access isochronous data.

9. (Amended) A computer system, comprising:

an isochronous channel having a linked list of buffers configured to receive

isochronous data transmitted within said computer system, each buffer comprising a data field for storing the isochronous data and a condition field for storing condition data to be evaluated against a condition;

a sender client associated with said isochronous channel and configured to transmit

said isochronous data, said sender client being a software driver routine associated with a sender node of said computer system; and

a listener client associated with said isochronous channel and configured to receive

said isochronous data, said listener client being a software driver routine associated with a listener node of said computer system[.], and said listener /

client loading the isochronous data into the linked list of buffers and evaluating the condition data in the condition field of each buffer to determine a next buffer from which to next access isochronous data; and

wherein said sender client has an associated channel identifier that is provided to said listener client.

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12. A computer readable medium for handling of real time data transmitted on an isochronous channel within a computer system, the computer readable medium comprising:
- a linked list of buffers, each buffer comprising a data field for storing the isochronous data, a condition field for storing condition data to be evaluated against a condition; a first pointer field for storing a first pointer to one of the buffers from which isochronous data is to be next accessed in response to the condition data satisfying the condition; and a second pointer field for storing a second pointer to one of the buffers from which isochronous data is to be next accessed in response to the condition data not satisfying the condition; and
- a program, executable on the computer system for receiving the isochronous data from a source device, loading the isochronous data into the linked list of buffers, evaluating the condition data in the condition field of each buffer to determine if the condition data satisfies the condition, and responsively using either the first pointer or the second pointer to next access isochronous data from one of the buffers.
13. The computer readable medium of claim 12, wherein each buffer further comprises:
- a pointer to a channel handler for performing a procedure on the buffer data prior to output of the data from the computer system.

14. The computer readable medium of claim 13 wherein the channel handler converts the isochronous data in the buffer from a first color space to a second color space.

15. The computer readable medium of claim 13 wherein the channel handler decompresses the isochronous data in the buffer.

16. The computer readable medium of claim 12 wherein the computer system comprises:
a frame buffer for receiving from the program the isochronous data read from the
buffers in accordance with the evaluation of the condition fields, for display of
the isochronous data on a display device.

17. A computer implemented process for handling of real time data transmitted on an isochronous channel within a computer system, the method comprising:
establishing a linked list of buffers for receiving isochronous data from a source
device, each buffer comprising a data field for storing the isochronous data, a
condition field for a storing condition data to be evaluated against a condition;
a first pointer field for storing a first pointer to one of the buffers from which
isochronous data is to be next accessed in response to the condition data
satisfying the condition; and a second pointer field for storing a second pointer
to one of the buffers from which isochronous data is to be next accessed in
response to the condition data not satisfying the condition; and
receiving the isochronous data from the source device;
loading the isochronous data into the linked list of buffers;
accessing the data in the linked list of buffers for output to a client device by:

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evaluating the condition data of each buffer to determine if the condition data
satisfies the condition; and

responsive to whether the condition data satisfies the condition, using the first
pointer or second pointer to access a next buffer.

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18. (New) The method of claim 1, wherein each buffer further comprises a first pointer
field for storing a first pointer to one of the buffers from which isochronous data is to be next
accessed in response to the condition data satisfying the conditions, and a second pointer field for
storing a second pointer to one of the buffers from which isochronous data is to be next accessed
in response to the condition data not satisfying the condition, and wherein said evaluating
comprises determining if the condition data satisfies the condition, and responsively using either
the first pointer or the second pointer to next access isochronous data from one of the buffers.

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